

CLAIMS

What is claimed is:

1. A method of error management in a data storage system having a target device, the target device receiving commands from a first initiator and the target device concurrently receiving commands from a second initiator, the method comprising managing errors associated with a command sent to the target storage device from the first initiator independently from errors associated with a command sent to the target device from the second initiator.
2. The method of claim 1 wherein the first initiator communicates with the target device through Small Computer Systems Interface (SCSI) protocol and the second initiator communicates with the target storage device through Peer-to-Peer Remote Copy (PPRC) initiator mode commands.
3. The method of claim 1 wherein managing errors associated with a command sent to the target device from the first initiator independently from errors associated with a command sent to the target device from the second initiator comprises:
 - determining the initiator type which has issued a command to the target device;
 - applying a first error recovery procedure to manage errors associated with a command directed to the target device from the first initiator; and
 - applying a second error recovery procedure to manage errors associated with a command directed to the target device from the second initiator.
4. The method of claim 1 further comprising preventing errors associated with a command directed to the target device from one of the first initiator and the second initiator from affecting access to the target device by the other of the first initiator and the second initiator.

5. The method of claim 1 further comprising allowing only one of the first initiator and the second initiator to have write access to the target device at a select time.
6. The method of claim 3 wherein the first error recovery procedure differs from the second error recovery procedure.
7. The method of claim 1 wherein the first initiator is a server and the second initiator is a storage device.
8. The method of claim 7 wherein the storage device is a PPRC primary storage device and the target device is a PPRC secondary storage device communicating with the PPRC primary storage device.
9. A target device of a data storage system, the target device receiving commands from a first initiator and concurrently receiving commands from a second initiator, the target device comprising means for managing errors associated with a command sent to the target device from the first initiator independently from errors associated with a command sent to the target device from the second initiator.
10. The target device of claim 9 wherein the first initiator communicates with the target device through Small Computer Systems Interface (SCSI) protocol and the second initiator communicates with the target device through Peer to Peer Remote Copy (PPRC) initiator mode commands.
11. The target device of Claim 9 further comprising:

means for determining the initiator type which has issued a command to the target device;

means for applying a first error recovery procedure to manage errors associated with a command directed to the target device from the first initiator; and

means for applying a second error recovery procedure to manage errors associated with a command directed to the target device from the second initiator.

12. The target device of claim 11 wherein the first error recovery procedure differs from the second error recovery procedure.

13. The target device of claim 9 further comprising means for preventing errors associated with a command directed to the target device from one of the first initiator and the second initiator from affecting access to the target device by the other of the first initiator and the second initiator.

14. The target storage device of claim 9 further comprising means for allowing only one of the first initiator and the second initiator to have write access to the target device at a select time.

15. The target device of claim 9 wherein the first initiator is a server and the second initiator is a storage device.

16. The target device of claim 15 wherein the storage device is a PPRC primary storage device and the target device is a PPRC secondary storage device communicating with the PPRC primary storage device.

17. An article of manufacture for use in programming a data storage system to manage errors, the data storage system having a target device, the target device receiving commands from a first initiator and the target device concurrently receiving commands from a second initiator, the article of manufacture comprising a storage

medium having logic embedded therein to cause components of the data storage system to manage errors associated with a command sent to the target device from the first initiator independently from errors associated with a command sent to the target device from the second initiator.

18. The article of manufacture of claim 17 wherein the logic causes the first initiator to communicate with the target device through Small Computer Systems Interface (SCSI) protocol and the logic further causes the second initiator to communicate with the target device through Peer to Peer Remote Copy (PPRC) initiator commands.

19. The article of manufacture of claim 17 wherein the logic further causes components of the data storage system to manage errors associated with a command sent to the target device from the first initiator independently from errors associated with a command sent to the target device from the second initiator by:

determining the initiator type which has issued a command to the target device;

applying a first error recovery procedure to manage errors associated with a command directed to the target device from the first initiator; and

applying a second error recovery procedure to manage errors associated with a command directed to the target device from the second initiator.

20. The method of claim 19 wherein the first error recovery procedure differs from the second error recovery procedure.

21. The article of manufacture of claim 17 wherein the logic further causes components of the data storage system to prevent errors associated with a command directed to the target device from one of the first initiator and the second initiator from

affecting access to the target device by the other of the first initiator and the second initiator.

22. The article of manufacture of claim 17 wherein the logic further causes components of the data storage system to allow only one of the first initiator and the second initiator to have write access to the target device at a select time.

23. The article of manufacture of claim 17 wherein the first initiator is a server and the second initiator is a storage device.

24. The article of manufacture of claim 23 wherein the storage device is a PPRC primary storage device and the target device is a PPRC secondary storage device communicating with the PPRC primary storage device.